



Installation Diagram

1 door Access control outdoor reader with 1200 lbs
Indoor electromagnetic lock
Model: CFX-ACCKIT-16

CrosFox
Reliable. Durable. Affordable



QUICK TIPS:

- . Make sure to cut off the connectors on both power supplies, then strip wire leads before installing.
- . In order to properly install this kit it is recommended that you use 18/2 or 20/2 gauge wire.
- . Before installing this kit, check with your local fire Authority for the compliance of fire codes.
- . For Programming instructions, refer to the user manual of the reader.
- . Crosfox or it's Distributors are not resspnsible for any damage due to the improper installation off this kit.

Attachment: Advanced Application

1.SR-2400 operating as a Controller

In this mode the SR-2400 supports a Wiegand 26 bit input so an external Wiegand device with a 26 bit output can be connected to the Wiegand input terminals on the CFX-SR-2400 Either an ID card reader (125 KHZ) or an IC card reader (13.56MHZ) can be connected to the CrosFox. Cards are required to be added at the external reader, except where an external EM reader is used, in this case cards can be added at either reader or controller. See figure 1

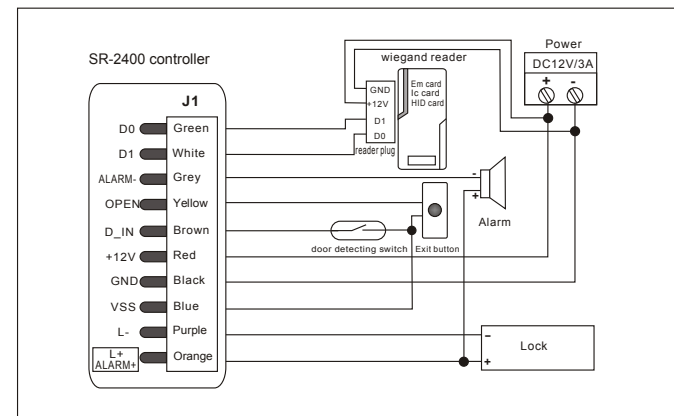


Figure 1

2.SR-2400 operating isa Wiegand Output Reader

In this mode the SR-2400 supports a Wiegand 26 bit Output so the Wiegand data lines can be connected to any controller which supports a Wiegand 26 bit input. See figure 2

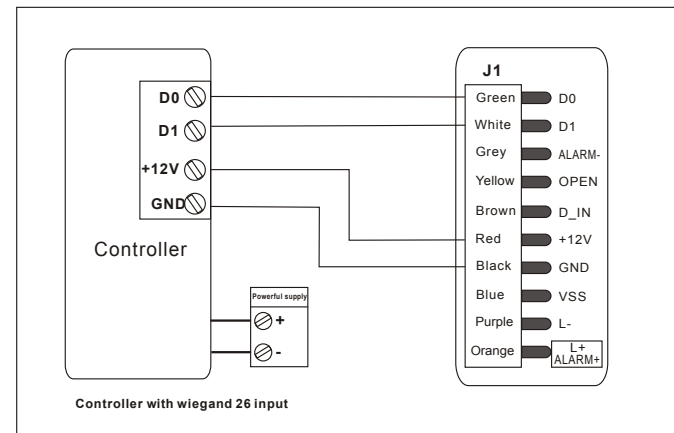


figure 2

3. Two CFX-SR-2400 units interconnected for a single door

In this mode two SR-2400 units are us for a single,door one for entry and the other for exit. Either device acts as the controller and reader at the same time. Users can be enrolled in either of the devices. In this mode the user capacity for one door can be up to 20000. The setting of the two SR-2400 units must be the same including the same including the master code. See figure 3

4.Two CFX-SR-2400 units interconnected & interlocked for 2 doors

two doors In this mode two SR-2400 units are used for two door swich are then interconnected and interlocked.In this mode the doors canbe interlocked so that when door 1 is open,door 2 cannot be opened, and vice versaThe interlocked function is mainly prisons,and other places where a higher levelof securityis required. See figure 4

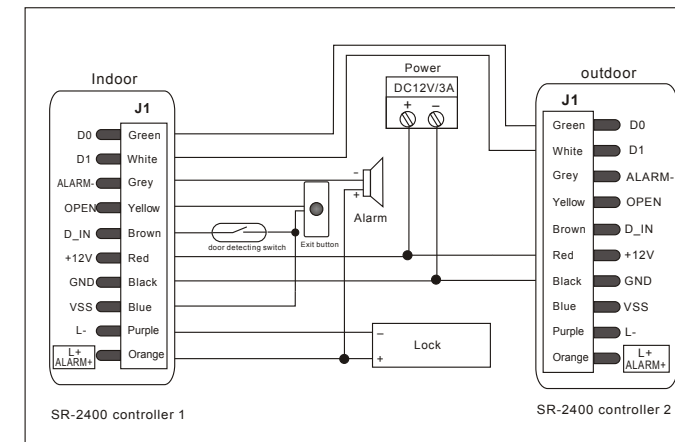


figure 3

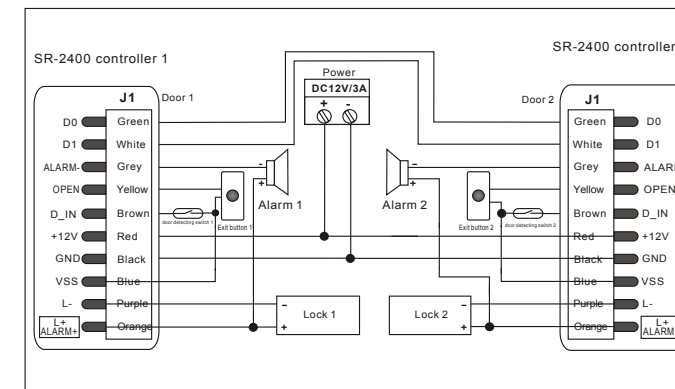


figure 4

5. Anti-submarine functionfor single door(3 1 #)

The connection diagram is as figure 1. Install one Wiegand reader (ora SR-2400 without user information as reader) outside the door,connecting to one SR-24000 Controller inside the door,which acts as the Anti-submarine Master unit. of the two devices, they build up an anti-submarine system for single door.The operation and function is as below:

5.1 Set the needed function and enroll the User Cards on the inside SR-2400 Anti-submarine Master unit.

5.2 With the valid user card, the user can only enter the door from the outside reader, and exit from the inside SR-2400 Controller.Onthe other hand, without entering record from the reader,the user can't exit fromthecontroller inside, also,the user can'tenter in twice without the first exit record, and vice versa.

Anti-submarine function for 2 doors

The connection diagram is as Figure 4. Door 1 with one SR-2400,and Door 2 with one, SR-2400 set one SR-2400 on Door 1 as the Anti-submarine Auxiliary(3 2 unit #), and set the other SR-2400 on Door 2 as the Anti-submarine Master unit (3 1 #). They build up a anti-submarine system, which is normally used for parking lot.....etc.

The operation and function is as below:

6.1 Set the needed function and enroll the User Cards from SR-2400 Anti-submarine Master unit on Door2.

6.2 With the valid user card, the user can only enter in from Door 1, and exit from Door2. On the other hand, without entering record from the Auxiliary unit, the user can't exit from the Master unit or Auxiliary unit, also, the user can't enter in twice without the first exit record, and vice versa.



1. Packing List

Name	Specification	Quantity
Standalone Proximity Reader	SR-2400	1
Infrared remote control		1
Manager card	One for add, one for delete	2
Short Pin	Used for factory default setting	1
User manual	SR-2400	1
Self Tapping Screws	Φ3.5*27mm	4/2

Please ensure that all the above contents are correct. If any are missing, please notify the supplier of the SR-2400.

2. Description

The SR-2400 is fully waterproof standalone Proximity access Reader which uses advanced microprocessor, equipped with large capacity Flash memory, supports up to 10,000 cards. It is so easy to add or delete card users by using the master card, besides, with Infrared remote control programmer the user can set the features by themselves, including Alarm, Self-protection, interlock and Anti-submarine back Function. In addition, with infrared remote control interlock and Anti-submarine back Function. In addition, with infrared remote.

The SR-2400 not only has the features of low power consumption, automatic selection of lock anti-vandal alarm and exit button, it also has the protective functions against input over voltage and outputs short-circuit. These features make the SR-2400 reliable and easy in operation. It is an ideal choice for door access.

3. Features

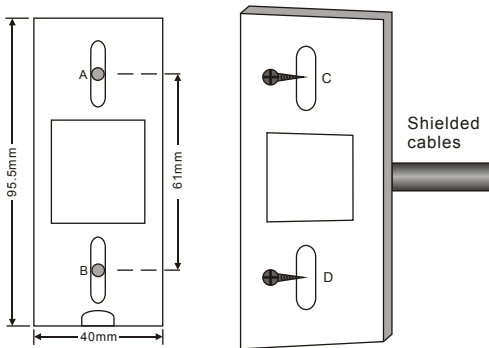
- Standalone Card Reader
- User capacity: 10,000
- Card interface: 125KHZ EM Card
- Remote control for programming
- With Manager cards for fast add and delete users
- Wiegand 26 input/output
- Can be used as slave reader
- 2 pcs/W can be interconnected/interlocked
- Can be used as controller by connecting slave reader
- Anti-submarine back Function
- Alarm signal output, Door open detection
- Full of 10,000 users, recognizing speed <15ms.

4. Specifications

Supply Voltage	DC12V ± 10%	Temperature	-20℃ ~ 60℃
Sleeping Current	<15mA	Humidity	20% ~ 98%
Card type	125KHZ EM card	Lock output load	Max20A
Card Reading Distance	5~10cm	Alarm output load	Max20A
Wiegand interface	Wiegand 26	Manager card	Two
User capacity	10,000	Dimensions	103 x 48 x 23mm

5. Installation

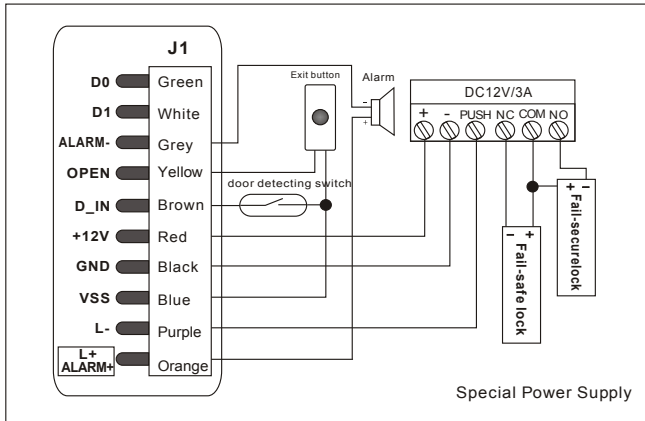
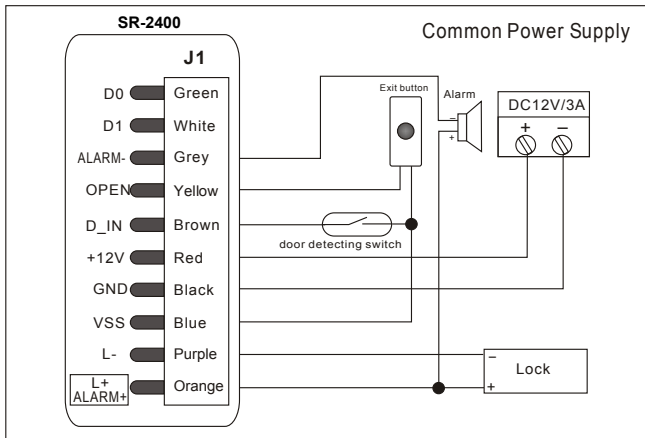
- Drill holes on the wall or prepare the cassette.
- Wire through the hole, and blanket the unused cable in case of short circuit.
- Fix the back cover firmly on the cassette or the wall.
- Attach the reader to the back cover.



6. Wiring

No	Color	Function	Description
1	Green	D0	Wiegand output, input signal wire D0
2	White	D1	Wiegand output, input signal wire D1
3	Grey	ALARM+	connecting to the negative pole of the alarm equipment
4	Yellow	OPEN	To connect to one part of Exit Button
5	Brown	D_IN	Door Contact input
6	Red	12V	(+) 12Vdc Positive Regulated Power Input
7	Black	GND	(-) Negative Regulated Power Input
8	Blue	VSS	the negative pole of the controller, connect to the other part of Exit button and door contact
9	Purple	L-	Connect to the negative pole of the Lock
10	Orange	L+/Alarm+	Connect to the positive pole of the lock and alarm equipment

Connection Diagram



Do not power on until all wiring has been completed

7. Interface Circuits

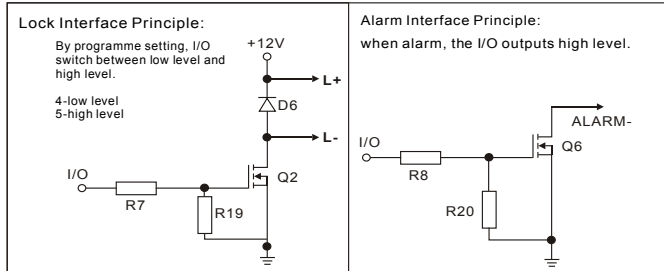


Figure 1

NOTE: The above diagrams show the output interface circuits. Unlike most lock and alarm outputs which use a relay that can be shocked or magnetized, the SR-2400 uses MOS outputs for both the Lock Output on the left and the Alarm Output on the right.

8. To Reset to Factory Default and Manager Card setting

Power off, use the supplied Contact Pin to short out the 2P socket on the mainboard, then power on, if successful, the beeper will beep twice, the LED shines in orange, remove the Short Pin, then read any two EM cards, after that the LED turns in red, means reset to factory default setting successfully. of the two EM cards read, the first one is Manager add card, the second one is Manager delete card.

Remarks: Reset to factory default setting, the users' information enrolled is still retained. When reset to Factory default setting, the two Manager cards must be re-enrolled.

9. Sound and Light indication

Operation status	LED	Buzzer
Reset to factory default setting	Orange	Two shorting
Sleeping mode	Red shines slow	
Operation successful		Short ring
Enter into programming mode	Red shines	Short ring
Enter into setting	Orange shines	Short ring
Exit from programming mode	Red shines slow	Short ring
Operation failed		Three short ring
Open the door	Green shines	Short ring
Alarm	Red shines fast	Alarm

10. SR-2400 Detailed Programming Guide

10.1 User settings

There are 2 ways to add and delete users:

A - By manager card: **B - By remote control**

A - By Manager card (The most convenient way)

To Add user by Manager Card	Manager add card Read user card Manager add card Cards can be added continuously.
To Delete User by Manager Card	Manager delete card Read user card Manager delete card Cards can be deleted continuously.

B- By Remote control

To Enter the programming mode	* Manager Password # 888888 is the default factory master code
-------------------------------	--

Remarks: All the steps below must be done after entering into programming mode

To change the master code	0 New Password # Repeat New Password # The master code must be 6~8 digit number.
---------------------------	--

To add a card user (Method 1)	1 Read Card # Card can be added continuously without exiting programming mode.
-------------------------------	--

To add a card user (Method 2)	1 Input Card number (8 digit) # The card number is the last 8 digits of the number printing on the card.
-------------------------------	--

To delete a card user	2 Read Card # or 2 Card number (8 digit) #
-----------------------	--

To delete ALL users. (Note: This option will delete all users but Manager Cards. Be careful with use)	2 0000 #
---	----------

10.2 Door setting

Lock Power Setting	
Fail secure (Unlocked when power on) This is the factory default, 3 seconds:	4 0~99 # 0-99 is to set the door relay time 0-99 seconds.
Fail safe (unlocked when power is off)	5 0~99 # 0-99 is to set the door relay time 0-99 seconds.
Anti-submarine Settings	

Anti-submarine Disabled	3 0 # (Factory default)
Anti-submarine Master Mode	3 1 #
Antisubmarine Auxiliary Mode	3 2 #

(Note: the detailed wiring diagram and illustration, please refer to the "Advanced application").

Door open detection
Door Open Too Long (DOTL) warning. When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door and continue for 1 minute before switching off automatically.
Door Forced Open warning. When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is forced open, or if the door is opened after 120 seconds of the electro-mechanical lock not closed properly, the inside buzzer and alarm output will both operate.

To disable door open detection. (Factory default)	6 0 #
To enable door open detection	6 1 #

Security Mode Setting

Reader Lockout & Alarm Output options. If there are 10 invalid cards within 10 minutes, the Reader will lockout for 10 minutes or the alarm will operate for 10 minutes, depending on the option selected below.

Normal status (No lockout or alarm)	7 0 # (Factory default setting)
Reader Lockout	7 1 #
Alarm Output	7 2 #

Door Interlock.

Door interlock disabled	8 0 #
Door interlock enabled	8 1 #

Alarm output time

To set the alarm output time (0-3 minutes) Factory default is 1 minute	9 0~3 #
--	---------

To remove the alarm

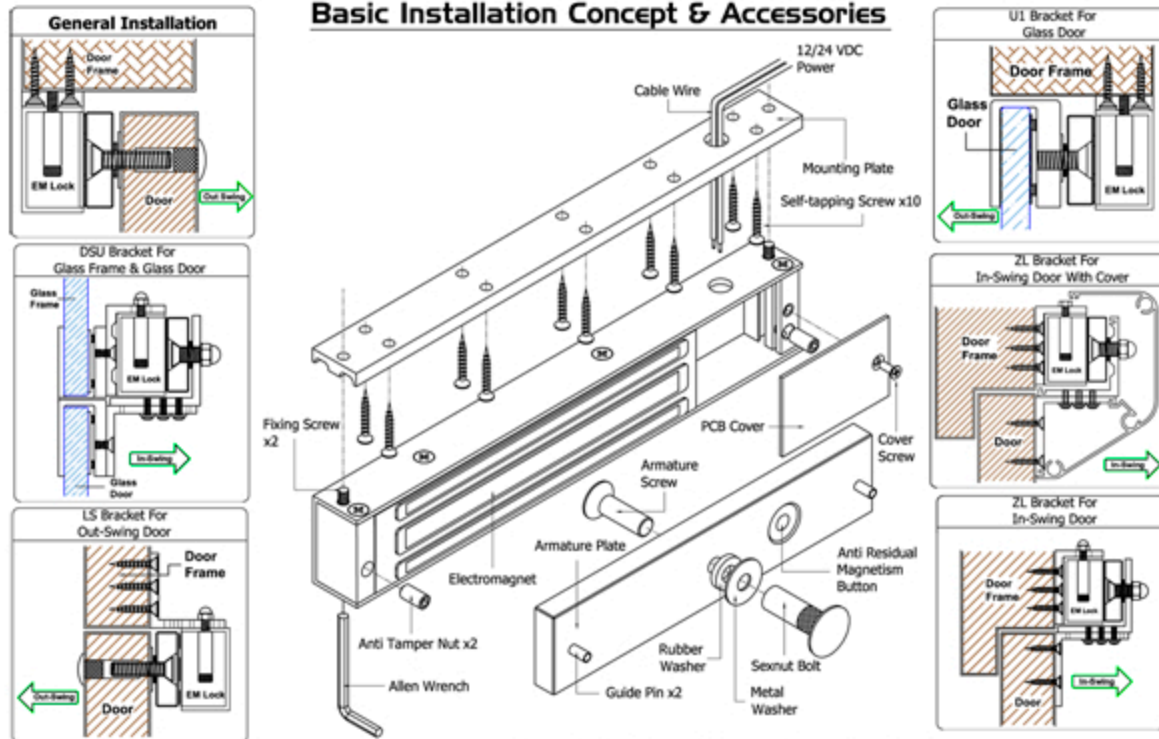
To remove the door forced open warning	Read valid card or Master Code #
To remove the door open too long warning	Close the door or Read valid card or Master Code #

To Unlock the door

To Unlock the door	Read user card Note: that Manager Card can't be used to unlock the door.
--------------------	---

Electromagnetic Door Lock 1200 lbs With LED and UL MODEL NUMBER:CFX-EL1200

Spec / Model	CFX-EL300	CFX-EL600	CFX-EL600TB	CFX-EL1200
Holding Force	300 lbs (136 Kg)	600 lbs (272 Kg)	600 lbs (272 Kg)	1200 lbs (545 Kg)
Voltage Input	12 VDC / 24 VDC	12 VDC / 24 VDC	12 VDC / 24 VDC	12 VDC / 24 VDC
Current Draw	320 mA / 160 mA	510 mA / 255 mA	480 mA / 240 mA	500 mA / 250 mA

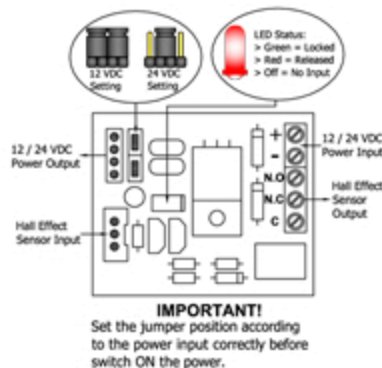


General Installation Steps & Maintainance

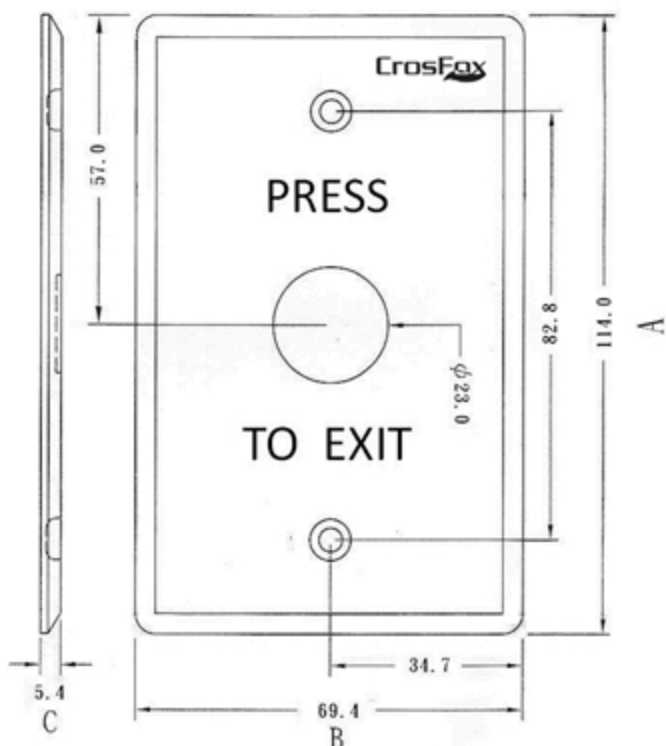
1. Drill the armature plate holes in the door using the sticker template provided.
2. Attach the armature plate to the door with the hardware provided per the illustration.
3. With the door closed, mark the door frame at the edge of the armature in order to properly align the electromagnet to the armature.
4. Attach the mounting plate to the door frame using the self-tapping screws provided. Align the mounting plate with the mark from the previous instruction.
5. Insert the wires through the hole in the mounting plate and into the electromagnet unit. Attach the electromagnet unit to the mounting plate with the Allen head fixing screw.
6. Screw in the anti-tamper nuts to prevent unauthorized access and to prevent the fixing screw from loosening over time.
7. Connect the power wires according to the instruction and test the system.
8. It is recommended that you apply a light coat of silicon lubricant to the mating surface on a monthly basis to prevent rust.

Trouble Shooting

- Sensor not functioning - Improper attachment of electromagnet and armature
 - Modification of the PCB
- Door not locked - Incorrect wiring or no power from power supply
- Reduced holding force - Poor contact of electromagnet and armature.
 - Be sure armature is loose enough that it can fully contact electromagnet along the entire length.
 - Mating surface is dusty or damaged.
 - Improper input voltage or wire size.



ILLUMINATED VANDAL RESISTANT PUSH-TO-EXIT BUTTON MODEL NUMBER: CFX-RDBEB-5004



Length (A): 114.0mm
Width (B): 69.40mm
Depth (C): 5.4mm

Length (A): 4.48 Inch
Width (B): 2.73 Inch
Depth (C): 0.21 Inch

PUSH-TO-EXIT BUTTON WIRING DIAGRAM:

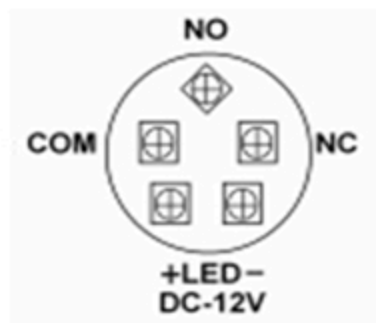


- (1) Push-button dry contact rating:
5A / 125VAC

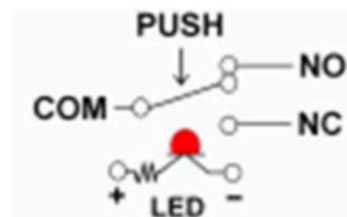
For safe operations, do not exceed the ratings above.

- (2) For Normally open requirements, connect wires to
N.O dry contact of PUSH-BUTTON

- (3) For Normally closed requirements, connect wire to
N.C dry contact of PUSH-BUTTON



Wire Color:
+ : Red
- : Black
N:O: Yellow
N:C : Blue
COM: Green



BOTTOM VIEW